UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

JAN 25 2007

(AE-17J)

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Allen Ellett, Air Team Leader
BP Products North America, Inc.
4001 Cedar Point Road
Oregon, Ohio 43697

Re: Finding of Violation for BP Products North America, Oregon, Ohio

Dear Mr. Ellett:

This is to advise you that the United States Environmental Protection Agency (U.S. EPA) has determined that the BP Products North America, Inc. facility at 4001 Cedar Point Road, Oregon, Ohio (BP Toledo) is in violation of the Clean Air Act (CAA). A list of the requirements violated is provided below. We are today issuing to you a Finding of Violation (FOV) for these violations.

Section 112(b) of the CAA established a list of hazardous air pollutants (HAPs) and provided that U.S. EPA shall add to the list additional pollutants that may present a threat of adverse human health effects through inhalation or other routes of exposure. Section 112(d) provides that U.S. EPA shall promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of listed HAPs.

On April 11, 2002, U.S. EPA promulgated the National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units (Refinery MACT II), 40 C.F.R. Part 63 Subpart UUU. U.S. EPA amended the Refinery MACT II on February 9, 2005. The purpose of these standards is to reduce, on a national scale, emission of chemicals that possess carcinogenic or toxic

Recycled/Recyclable . Printed with Vegetable Oil Based Inks on 100% Recycled Paper (50% Postconsumer)

characteristics. The Refinery MACT II includes the following requirements:

1) Owners or operators of catalytic cracking units must meet a metal HAP emission limit.

2) Owners or operators of catalytic cracking units may elect to comply with the metal HAP emission limit by meeting the pounds of nickel per 1,000 pounds of coke burn-off emission limit.

3) Owners or operators of catalytic cracking units that choose to comply with the pounds of nickel per 1,000 pounds of coke burn-off emission limit and that use a continuous opacity monitoring system are required to demonstrate continuous compliance using an equation that includes the hourly average gas flow measured by a continuous parameter monitoring system.

4) Owners or operators of affected sources must install, operate and maintain continuous parameter monitoring equipment according to the requirements in the Refinery MACT II.

5) Owners or operators of catalytic reforming units must meet an inorganic HAP emission limit.

6) Owners or operators of catalytic reforming units may elect to comply with the inorganic HAP emission limit by meeting the hydrogen chloride (HCl) concentration limit.

7) Owners or operators of catalytic reforming units that use internal scrubbers to comply with the inorganic HAP emission limit are required to measure and record the concentration of HCl every four hours using a colorimetric tube sampling system.

8) Owners or operators of affected sources are required to prepare and implement an operation, maintenance and monitoring plan that incorporates all monitoring requirements in the Refinery MACT II and operate at all times according to the procedures in this plan.

9) Owners or operators of affected sources are required to keep records of all monitoring data required by the Refinery MACT II.

U.S. EPA finds that BP Toledo has violated the above listed Refinery MACT II requirements as incorporated into BP Toledo's Title V Permit. Because BP Toledo violated regulatory requirements contained in its Title V permit, you have also violated Title V of the CAA and its associated regulations that require compliance with the terms and conditions of Title V permits.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action. The option we select, in part, depends on the efforts taken by BP Toledo to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the FOV.

Before we decide which enforcement option is appropriate, U.S. EPA is providing you with the opportunity to request a conference with us about the violations alleged in the FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The U.S. EPA contact in this matter is Erik Hardin. You may call him at (312) 886-2402 if you wish to request a conference. U.S. EPA hopes that this FOV will encourage BP Toledo's compliance with the requirements of the Clean Air Act.

Sincerely yours,

Stephen Rothblatt, Director
Air and Radiation Division

Enclosure

cc: Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Agency

Karen Granata, Administrator
City of Toledo Division of Environmental Services

United States Environmental Protection Agency
Region 5

IN THE MATTER OF:	)	**FINDING OF VIOLATION**
	)	
BP Products North America	)	**EPA-5-07-OH-05**
Toledo, Ohio	)	
	)	
	)	
Proceedings Pursuant to	)	
the Clean Air Act,	)	
42 U.S.C. §§ 7401 et seq.	)	

FINDING OF VIOLATION

BP Products North America, Inc. (you or BP) owns and operates a petroleum refinery at 4001 Cedar Point Road in Oregon, Ohio (BP Toledo or the Facility). The refinery consists of a number of emissions units including a catalytic cracking unit (Ohio EPA emission unit number P007) and a catalytic reforming unit (Reformer 1 also known as Ohio EPA emission unit P019).

U.S. EPA is sending this Finding of Violation (FOV) to you because you failed to demonstrate continuous compliance with emission limits and failed to continuously comply with an emission limit as required by your Title V permit and the National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units (Refinery MACT II), 40 C.F.R. Part 63 Subpart UUU.

U.S. EPA is providing you with the opportunity to request a conference with us to discuss the violations alleged in the FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for the Facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

Explanation of Violations

1. Ohio Environmental Protection Agency issued Title V Permit 04-48-02-0007 (Title V Permit) to BP Toledo on September 27, 2004. The Title V Permit incorporates the following provisions of the Refinery MACT II that are relevant to this FOV:

   a. 40 C.F.R. § 63.1564(a)(1) requires owners or operators of catalytic cracking units to meet one of four limits for metal hazardous air pollutant (HAP) emissions.

   b. One of these limits (Option 4), located at 40 C.F.R. § 63.1564(a)(1)(iv), sets a pounds of nickel per 1,000 pounds of coke burn-off emission limit.

   c. 40 C.F.R. § 63.1564(c)(4) requires owners or operators of catalytic cracking units who use a continuous opacity monitoring system and who elect to comply with the Option 4 limit to demonstrate continuous compliance with this limit using Equation 12 from the Refinery MACT II.

   d. Among other parameters, Equation 12 from the Refinery MACT II requires the use of the hourly average flow rate of the exhaust gas from the catalytic cracking unit as measured by a continuous parameter monitoring system or calculated by the alternative procedure in 40 C.F.R. § 63.1573.

   e. 40 C.F.R. § 63.1573(a) prohibits the use of the alternative procedure to calculate the exhaust gas flow rate if other gas streams are introduced into the catalyst regeneration vent.

   f. 40 C.F.R. § 63.1572(c) requires the installation of continuous parameter monitoring equipment according to the requirements in the Refinery MACT II.

   g. 40 C.F.R. § 63.1567(a)(1) requires owners or operators of catalytic reforming units to comply with each applicable limit for inorganic HAP emissions located in Table 22 of the Refinery MACT II.

   h. Table 22 of the Refinery MACT II requires owners or operators of cyclic catalytic reforming units to

either meet a 97 percent hydrogen chloride (HCl) removal efficiency or a 10 parts per million by volume (ppmv) outlet concentration, corrected to 3 percent oxygen.

i. 40 C.F.R. § 63.1567(c)(1) requires owners or operators of catalytic reforming units to demonstrate continuous compliance with the HCl limit according to the methods specified in Table 28 of the Refinery MACT II.

j. Table 28 of the Refinery MACT II requires owners or operators of catalytic reforming units that use an internal scrubber to meet the HCl emission limit to demonstrate continuous compliance by measuring and recording the HCl emission rate every four hours using colorimetric tube sampling and maintaining the HCl concentration below the applicable operating limit.

k. 40 C.F.R. § 63.1573(d) and (e) provide for the request and approval of alternative monitoring parameters.

l. 40 C.F.R. § 63.1564(a)(3) and 40 C.F.R. § 63.1567(a)(3) require owners or operators of affected sources under the Refinery MACT II to prepare an operation, maintenance, and monitoring plan according to the requirements of 40 C.F.R. § 63.1574(f) and to operate at all times according to the procedures in the plan.

m. 40 C.F.R. § 63.1574(f)(2)(i) requires the operation, maintenance, and monitoring plan to include process and control device parameters to be monitored for each affected source, along with established operating limits.

n. 40 C.F.R. § 63.1576(d) requires owners or operators of affected sources to keep all records of monitoring data required by the Refinery MACT II.

2. BP Toledo has chosen to comply with the Option 4 limit at 40 C.F.R. § 63.1564(a)(1)(iv) to meet the metal HAP standards for its catalytic cracking unit.

3. Because BP Toledo uses a continuous opacity monitor on its catalytic cracking unit and introduces other gas streams into the catalyst regeneration vent, it must use Equation

12 from the Refinery MACT II to demonstrate continuous compliance with the Option 4 emission limit.

4. 40 C.F.R. § 63.1572(c) requires BP Toledo to install a continuous parameter monitoring system to measure the hourly average flow rate of the exhaust gas from the catalytic cracking unit because this parameter is required for the use of Equation 12 of the Refinery MACT II.

5. During an inspection on November 14, 2006, through November 16, 2006, U.S. EPA discovered that BP Toledo had not installed a continuous parameter monitoring system to measure the hourly average flow rate of the exhaust gas from the catalytic cracking unit. Thus, BP Toledo is in violation 40 C.F.R. § 63.1572(c).

6. Because BP Toledo has not had a continuous parameter monitoring system to measure the hourly average flow rate of the exhaust gas from the catalytic cracking unit, it cannot demonstrate continuous compliance with the Option 4 limit using Equation 12 from the Refinery MACT II. Thus, BP Toledo is in violation of 40 C.F.R. § 63.1564(c)(4).

7. BP Toledo failed to operate a continuous parameter monitoring system to measure and record gas flow rate at the catalytic cracking unit in accordance with its May 31, 2006, Operation, Maintenance, and Monitoring Plan, which is a violation of 40 C.F.R. § 63.1564(a)(3).

8. BP Toledo uses an internal scrubber to control the HCl emissions from its catalytic reforming unit known as Reformer 1.

9. BP Toledo has chosen to meet the inorganic HAP emission limit from Reformer 1 by achieving an outlet HCl concentration of 10 ppmv, corrected to 3 percent oxygen.

10. In a compliance report submitted to U.S. EPA on January 30, 2006, BP Toledo reported measured HCl outlet concentrations of greater than 10 ppmv on several occasions in July, 2005. These exceedances are violations of 40 C.F.R. § 63.1567(a)(1).

11. On September 1, 2005, U.S. EPA approved a request by BP Toledo to monitor the liquid to gas ratio as a means of demonstrating continuous compliance with the HCl emission

limit for Reformer 1, in lieu of colorimetric tube sampling.

12. In its September 8, 2005, Notification of Compliance Status Report and Operation, Maintenance, and Monitoring Plan for Reformer 1, BP Toledo proposed a minimum liquid to gas ratio of 23.0 gallons per million standard cubic feet (gal/MSCF) to demonstrate compliance with the HCl emission limit for this unit. This minimum liquid to gas ratio was based on the results of a test conducted from August 16 through August 30, 2005.

13. The August 16 through August 30, 2005, HCl test for Reformer 1 showed compliance while the internal scrubber was operating with a liquid to gas ratio that was consistently higher than 23.0 gal/MSCF.

14. In a compliance report submitted to U.S. EPA on January 30, 2006, BP Toledo reported that on numerous occasions after September 8, 2005, it operated Reformer 1 while the liquid to gas ratio of the internal scrubber was not maintained above 23.0 gal/MSCF. This is a violation of 40 C.F.R. § 63.1567(c)(1).

15. In a compliance report submitted to U.S. EPA on January 30, 2006, BP Toledo reported that on July 5, 10, and 11, 2005, results of colorimetric tube samples showed HCl concentrations in excess of 10 ppmv over a 24 hour period. These are violations of 40 C.F.R. § 63.1567(a)(1).

16. In a compliance report submitted to U.S. EPA on January 30, 2006, BP Toledo reported that it had failed to maintain records of liquid to gas ratio values and numerous colorimetric tube samplings completed to demonstrate continuous compliance with the inorganic HAP emission limit for Reformer 1. These failures are violations of 40 C.F.R. § 63.1576(d).

17. BP Toledo failed to operate a continuous parameter monitoring system to measure total scrubbing liquid flow rate entering the scrubbing system of Reformer 1 in accordance with its September 8, 2005, Operation, Maintenance, and Monitoring Plan, which is a violation of 40 C.F.R. § 63.1567(a)(3).

18. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b) requires that a source subject to Title V operate in compliance with its Title V permit. Therefore, BP Toledo's violations of the Refinery MACT II requirements also constitute violations of 40 C.F.R § 70.7(b).

Environmental Impact of Violations

19. Violations of HAP standards may cause serious health effects including birth defects and cancer. HAPs may also cause harmful environmental and ecological effects.

1/25/2007
Date

Stephen Rothblatt, Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-07-OH-05, by Certified Mail, Return Receipt Requested, to:

Allen Ellett, Air Team Leader
BP Products North America, Inc.
4001 Cedar Point Road
Oregon, Ohio 43697

I also certify that I sent copies of the Finding of Violation and Notice of Violation by first class mail to:

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Agency
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049

Karen Granata, Administrator
City of Toledo Division of Environmental Services
348 South Erie Street
Toledo, Ohio 43602

on the 26th day of January, 2007.

Loretta Shaffer

Loretta Shaffer, Secretary
AECAS, (MN/OH)

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0005 8919 2386